In 1980, EPA issued regulations providing guidance to States on how to structure PSD programs in their State Implementation Plans ("SIPs"). 45 Fed. Reg. 52676 (Aug. 7, 1980). (EPA recodified these regulations into 40 C.F.R. § 51.166 in 1987). The states of North Carolina and South Carolina incorporated these federal regulations into their SIPs in 1982. *See* 47 Fed. Reg. 7836, 7837 (Feb. 23, 1982) (North Carolina) and 47 Fed. Reg. 6017 (Feb. 10, 1982) (South Carolina). Thus it is the language of 40 C.F.R. § 51.166 that must be the focus in this case.

The regulations define "major modification," subject to key exceptions discussed below, as:

> [A]ny physical change in or change in the method of operation of a major stationary source that would result in a significant ***net emissions increase*** of any pollutant subject to regulation under the Act.

40 C.F.R § 51.166(b)(2)(I) (emphasis added). Pet. App. 103a.

"Net emissions increase" is defined as follows:

> [T]he amount by which the sum of the following exceeds zero: (a) [a]ny increase in ***actual emissions*** from a ***particular physical change or change in the method of operation*** at a stationary source; and (b) [a]ny other increases and decreases in ***actual emissions*** at the source that are contemporaneous with the ***particular change*** and are otherwise creditable.

40 C.F.R § 51.166(b)(3)(i)(emphasis added). Pet. App. 104a.

The key analysis under this definition is whether the particular "change" will lead to an increase in "actual emissions." This term "actual emissions" has a lengthy definition:

> (i) "Actual emissions" means the actual rate of emissions of a pollutant from an emissions unit, as determined in accordance with paragraphs (b)(21)(ii)- (b)(21)(iv) of this section.
>
> (ii) In general, actual emissions as of a particular date shall

equal the average rate, ***in tons per year***, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is ***representative of normal source operation***. The reviewing authority may allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(iii) The reviewing authority may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(iv) ***For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.***

40 C.F.R § 51.166(b)(21) (emphasis added).

Given this language, to determine whether an increase in "actual emissions" will occur, one generally looks to the facility's annual emissions for the two years preceding the project, 40 C.F.R § 51.166(b)(21)(ii), and compares them to the facility's emissions after the project. This analysis, of course, must occur before a project is undertaken, and so EPA, in promulgating the regulation, had to develop some methodology for estimating what actual emissions would be after the project was completed. EPA chose to define "actual emissions" for a facility that had not begun "normal operations" to be the facility's "potential to emit"[3] after the project. 40 C.F.R

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[3] The regulations define "potential to emit" as: "the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or

§ 51.166(b)(21)(iv).

This test is commonly known as the "actual to potential" test, Pet. App. 57a, and it sweeps many sources into the PSD program because of its inherent assumption that sources, after making a modification, will operate "24 hours per day, 365 days per year." *Wisconsin Electric Power Co. v. Reilly*, 893 F.2d 901, 916 (7th Cir. 1990) ("*WEPCO*"). The Seventh Circuit, however, rejected the application of this test to existing power plant sources, holding that if a power plant is engaged in a "like-kind replacement," then EPA cannot properly say that the source making the modification has not commenced normal operations. *Id.* (interpreting 40 C.F.R § 51.166(b)(21)(iv)).

After the Seventh Circuit's 1990 ruling, EPA created a special emissions increase test exclusively for power plants that allows a plant owner to determine whether emission increases will occur by comparing actual emissions prior to the change with its projection of what annual emissions will be after the change, but only if it reports to EPA on its post-project emissions. 57 Fed. Reg. 32314, 32335 (July 21, 1992)(adding 40 C.F.R § 51.166(b)(21)(v)). This 1992 regulation has no application in this case, however, because at the time most of the projects occurred, the rule change was not incorporated into the North Carolina and South Carolina SIPs. Furthermore, Duke Energy never reported on its post-project emissions, so it could not benefit from the rule's provisions in any event.

Whether the Seventh Circuit in *WEPCO* was correct regarding the proper methodology for determining post-project "actual emissions" is, for the purposes of this case, irrelevant.[4]

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the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source." 40 C.F.R § 51.166(b)(4).

[4] EPA was prepared to proceed in the case using the actual-to-future-actual test. Pet. App. 58a, n. 17.

While both the "actual-to-potential" and *WEPCO* methodologies are grounded in the language of the regulations themselves, that regulatory language simply does not support an interpretation yielding an hourly emissions test. *See* 40 C.F.R § 51.166(b)(21)(ii) ("[A]ctual emissions . . . shall equal the average rate, in ***tons per year***, at which the unit actually emitted the pollutant . . . .").

Although the Fourth Circuit, as mentioned above, never discussed the actual language of the regulations, the district court did, finding that an exception contained within the definition of "major modification," 40 C.F.R § 51.166(b)(2)(iii)(f), (the "increased hours" exclusion) imposes, despite the language set forth above, the hourly emissions test. Pet. App. 72a. The language focused upon by the district court is as follows:

> (2)(i)"Major modification" means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act.
>
> (ii) Any net emissions increase that is significant for volatile organic compounds shall be considered significant for ozone.
>
> (iii) A physical change or change in the method of operation shall not include:
>
> > (a) Routine maintenance, repair, and replacement;
> >
> > (b) Use of an alternative fuel or raw material by reason of any order under sections 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
> >
> > (c) Use of an alternative fuel by reason of an order or rule under section 125 of the Act;

> (d) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
> (e) Use of an alternative fuel or raw material by a stationary source . . . ;
> (f) ***An increase in the hours of operation or in the production rate***, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Subpart I or 40 CFR 51.166.
>
> . . .

40 C.F.R § 51.166(b)(2)(emphasis added). The district court ruled that the "increased hours" exclusion required "that in calculating post-project emissions, the EPA must hold the pre-project and post-project hours and conditions of operation constant." Pet. App. 72a.

The district court's analysis was incorrect. As mentioned above, the "modification" test has two elements. First, a source must determine whether a physical or operational change will occur. 40 C.F.R. 51.166(b)(2)(i). Second, if so, the source must determine whether that change will result in a significant net emissions increase. *Id.* By its explicit terms, the "increased hours" exclusion applies at the first step of the analysis, not the second step. Furthermore, the definition of "net emissions increase," 40 C.F.R. § 51.166(b)(3)(i), analyzes whether "a particular physical change or change in the method of operation" at a source has increased emissions. A project that falls within the "increased hours" exclusion could never qualify as the type of "change" that subsection (b)(3)(i) addresses. To put it another way, if the "increased hours exclusion" applies to a project, it would be unnecessary to go on and conduct the "emissions increase" analysis because the activity in question

would have already been found exempt.

Thus the plain language of the regulations does not support a conclusion that the "increased hours" exclusion affects the calculation of a "net emissions increase." As the court said in *United States v. Cinergy Corp.*, 384 F. Supp. 2d 1272, 1278 (S.D. Ind. 2005) (appeal pending): "the plain meaning of the increased hours exclusion is that an increase in hours or production rate are not a 'physical change' and thus cannot, alone, be a modification. Increased hours and production rate are not excluded from the definition of 'modification'; that is, if a physical change results in an increase in hours of operation that causes a net emissions increase, a modification has occurred."[5]

Accordingly, what the Fourth Circuit should have done in this case is determine, by carefully reading the regulations, whether the district court's interpretation of the regulations was correct. Instead, the Fourth Circuit failed to "interpret" the regulations at all. Instead, it examined whether the regulations comported with its view of what the statute required, and that type of review was reserved by Congress for the D.C. Circuit, which upheld the regulations in *New York v. Environmental Protection Agency*, 413 F.3d 3. 18-20 (D.C. Cir. 2005).

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[5] Indeed, if the hours-of-operation exclusion were interpreted to include increases in hours of operation that resulted from actual physical modifications, it would lead to the following anomalous result: if a project made physical changes to a source that increased the source's capacity to produce in any particular hour, but did not increase the source's availability to operate more hours, then that project would trigger PSD, but if the project increased ***both*** capacity and availability, it would not.

C. ALLOWING A COLLATERAL ATTACK OF AN ENVIRONMENTAL REGULATION IN THE CONTEXT OF AN ENFORCEMENT ACTION WOULD UNDERMINE THE ENFORCEMENT SCHEME OF MANY ENVIRONMENTAL STATUTES

Allowing the type of collateral attack on the regulations that occurred in this case would not only undermine the Clean Air Act's enforcement scheme, but also similar restrictions on judicial review established by Congress in many other environmental statutes. Examples abound:

- ***Clean Air Act***. 42 U.S.C. § 7607(b)(1) provides in pertinent part (emphasis added) that:

  > ***A petition for review of action of the Administrator in promulgating*** any national primary or secondary ambient air quality standard, any emission standard or requirement under section 7412 of this title, any standard of performance or requirement under section 7411 of this title, any standard under section 7521 of this title (other than a standard required to be prescribed under section 7521(b)(1) of this title), any determination under section 7521(b)(5) of this title, any control or prohibition under section 7545 of this title, any standard under section 7571 of this title, any rule issued under section 7413, 7419, or under section 7420 of this title, ***or any other nationally applicable regulations promulgated, or final action taken, by the Administrator under this chapter may be filed only in the United States Court of Appeals for the District of Columbia. . . .***

42 U.S.C. § 7607(b)(2) provides in pertinent part that:

> Action of the Administrator with respect to which review could have been obtained under paragraph (1) shall not be subject to judicial review in civil or criminal proceedings for enforcement. . . .

Applying these provisions, the Fifth Circuit, in the context of a criminal proceeding for violations of asbestos removal work practice standards, refused to entertain an argument that the regulation was invalid. *See United States v. Ho*, 311 F.3d 589, 607 (5th Cir. 2002), *cert. denied* 539 U.S. 914, 123 S. Ct. 2274 (2003). *See also Getty Oil Co. (Eastern Operations), Inc. v. Ruckelshaus*, 467 F.2d 349, 359 (3d Cir. 1972), *cert. denied*, 409 U.S. 1125 (1973) ("Failure to utilize the section 307 proceeding forecloses review in a civil or criminal proceeding for enforcement."); *Commonwealth of Virginia v. United States*, 74 F.3d 517, 525 (4th Cir. 1996)("Because Congress wanted prompt and conclusive review in air quality controversies, it channeled (to the courts of appeals) all challenges, regardless of their basis, of EPA rules and final actions."); *Madison Gas & Electric v. U.S. E.P.A.*, 4 F.3d 529 (7th Cir. 1993) (Challenge to national feature of acid rain program, such as tradability of emission allowances, may be brought only in Court of Appeals for the District of Columbia Circuit, even if impact of program varied greatly across the country).

- ***Clean Water Act***. 33 U.S.C. § 1369(b)(2); *see Longview Fibre Co. v. Rasmussen*, 980 F.2d 1307, 1313 (9th Cir. 1992)("Reviewability under section 1369 carries a peculiar sting. . . . If an EPA action is reviewable under section 1369(b)(1), then it "shall not be subject to judicial review in any civil or criminal proceeding for enforcement." 33 U.S.C. § 1369(b)(2)."); *see also American Paper Inst., Inc. v. EPA*, 882 F.2d 287, 288-89 (7th Cir. 1989)("the Clean Water Act bars review in enforcement proceedings

of actions that could have been reviewed earlier"); *Natural Resources Defense Council, Inc. v. Outboard Marine Corp.* 702 F. Supp. 690, 693 (N.D. Ill. 1988)("Section 1369(b)(1)(F) permits review of an EPA action issuing or denying a permit only in the Circuit Court of Appeals. Section 1369(b)(2) then expressly bars review of an EPA-issued or EPA-denied permit in any District Court enforcement proceeding.");

- ***Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA")***, 42 U.S.C. § 9613(a); *see U.S. Ecology, Inc. v. Carlson*, 638 F. Supp. 513, 518-19 (C.D. Ill. 1986)(challenge to a listing on the National Priorities List can only be brought in the D.C. Circuit);

- ***Toxic Substances Control Act ("TSCA")***, 15 U.S.C. § 2618(a); *see Dow Chemical Co. v. Costle*, 484 F. Supp. 101, 104 (D. Del. 1980)(court ruled it had no jurisdiction because, although chemical company claimed it was challenging interpretation and application of regulation imposing a ban on manufacture, it was in fact challenging validity of regulation itself);

- ***Resource Conservation and Recovery Act ("RCRA")***, 42 U.S.C. § 6976(a)(2);

- ***Safe Drinking Water Act***, 42 U.S.C. § 300j-7(a).

In statute after statute, Congress has consistently established a sensible system for judicial review. Challenges to regulations must be brought in the D.C. Circuit, and usually within 60 days of promulgation. Enforcement actions are not to be hindered by such challenges. The Fourth Circuit's decision upsets this carefully crafted system for the administration of justice.

D. THE OUTCOME IN THIS CASE COULD HAVE BROAD IMPLICATIONS ON THE AIR QUALITY IN THE NATION'S NATIONAL PARKS

This case and others filed by the Department of Justice and citizens seek to bring into compliance sources that have attempted to evade New Source Review requirements on a massive scale. According to the Greenwire News Service, in addition to this case, there are nine cases pending around the country covering 39 coal-fired power plants. In addition, government action has led to clean-ups of 25 other such plants.[6]

Overall, according to the Energy Information Administration, this year, roughly fifty percent of the electricity generated in the United States was from coal.[7] Over 65% of sulfur dioxide ("SO_2") released to the air, or more than 13 million tons per year, comes from electric utilities, especially those that burn coal.[8] Another 18% comes from non-utility, coal burning industries. *Id.* Similarly, utilities are responsible for 22% of the nation's nitrogen oxide ("NO_x") emissions,[9] and coal-fired power plants emit into the atmosphere over 50 tons

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[6] "Enforcement Chart – New Source Review, An E&E Publishing Special Report."Available at: http://www.eenews.net/features/special_reports/nsr/enforcement_chart.php (last visited July 16, 2006).

[7] U.S. Energy Information Administration, "Electric Power Monthly" (July 2006), available at: http://www.eia.doe.gov/cneaf/electricity/epm/epm_sum.html (last visited July 16, 2006).

[8] United States Environmental Protection Agency, "SO_2: What is it? Where does it come from?," available at http://www.epa.gov/air/urbanair/so2/what1.html (last visited July 16, 2006).

[9] United States Environmental Protection Agency, "NO_x: What is it? Where does it come from?," available at http://www.epa.gov/air/urbanair/nox/what1.html (last visited July 16, 2006).

of mercury each year.[10]

These pollutants cause tremendous damage. SO_2 contributes to respiratory illness, particularly in children and the elderly, and aggravates existing heart and lung diseases. It also contributes to the formation of acid rain, which damages trees, crops, historic buildings, and monuments and makes soils, lakes, and streams acidic. It also causes the formation of atmospheric particles that cause visibility impairment, most noticeably in national parks.[11] NO_x is one of the main ingredients involved in the formation of ground-level ozone, which can trigger serious respiratory problems and reacts to form nitrate particles, acid aerosols, as well as NO_2, which also cause respiratory problems. NO_x also contributes to formation of acid rain, to nutrient overload that deteriorates water quality, to visibility impairment, and to global warming. It also reacts to form toxic chemicals.[12]

The link between SO_2 and NO_x and visibility impairment is particularly well-known. Twenty-nine years ago, Congress stated: "[the] visibility problem is caused primarily by emission into the atmosphere of sulfur dioxide, oxides of nitrogen and particulate matter, especially fine particulate matter, from inadequate[ly] controlled sources." H.R. Rep. 294, 95th Cong. (1977), at 204, 1977 U.S.C.C.A.N. 1077, 1283 (1977). According to the National Research Council, emissions of

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[10] United States Environmental Protection Agency, "Controlling Power Plant Emissions: Overview"available at http://www.epa.gov/mercury/control_emissions/index.htm (last visited July 16, 2006).

[11] United States Environmental Protection Agency, "Six Common Air Pollutants: Chief Causes of Concern," http://www.epa.gov/air/urbanair/so2/chf1.html (last visited July 16, 2006).

[12] United States Environmental Protection Agency, "Six Common Air Pollutants: Chief Causes of Concern," available at: http://www.epa.gov/air/urbanair/nox/chf1.html (last visited July 16, 2006).

sulfur oxides from electric utilities "alone are responsible for slightly more than one-half of anthropogenic light extinction. This is because sulfates are the predominant component of anthropogenic haze in the East and electric utilities are the predominant emitter of SO_2 (sulfur dioxide) in the East. National Research Council, "Protecting Visibility in National Parks and Wilderness Areas" (1993), at 216.

Another important pollutant linked to coal combustion is mercury. Mercury in the air eventually settles into water or onto land where it can be washed into water. Once deposited, certain microorganisms can change it into methylmercury, a highly toxic form that builds up in fish, shellfish and animals that eat fish. Mercury exposure at high levels can harm the brain, heart, kidneys, lungs, and immune system of people of all ages. High levels of methylmercury in the bloodstream of unborn babies and young children may harm the developing nervous system, making the child less able to think and learn. Birds and mammals that eat fish are more exposed to mercury than other animals in water ecosystems. Similarly, predators that eat fish-eating animals may be highly exposed. At high levels of exposure, methylmercury's harmful effects on these animals include death, reduced reproduction, slower growth and development, and abnormal behavior.[13]

Impacts of these pollutants on our nation's National Parks is pronounced. Great Smoky Mountains National Park encompasses more than 800 square miles of the Southern Appalachians in Tennessee and North Carolina and features elevations ranging from 875 feet to 6,643 feet. Abundant rainfall (averaging 55 inches a year in the valleys and 85 inches on some peaks) and high summertime humidity provide excellent growing conditions for an amazing variety of plants:

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[13] United States Environmental Protection Agency, "Frequent Questions About Mercury," available athttp://www.epa.gov/mercury/faq.htm#3(last visited July 20, 2006).

approximately 100 species of native trees, more than 1,400 additional flowering plant species, and at least 4,000 species of non-flowering plants. Forests blanket almost 95 percent of the park; 25 percent is old-growth forest.[14] The park also contains 74 percent of the spruce-fir forests in the southern Appalachians, and is home to the largest remnant red spruce-Fraser fir ecosystem in the world.[15] The park is also home to more than 200 species of birds, 66 types of mammals, 50 native fish species, 39 varieties of reptiles, 43 species of amphibians, and one of the most diverse populations of lungless salamanders. Mollusks, millipedes, and mushrooms also are found in record variety.[16]

Unfortunately, Great Smoky Mountains National Park also has the highest rate of nitrogen and sulfur deposition of any monitored location in North America. As a result, rainfall in the park is 5-10 times more acidic than natural rainfall. In fact, ten percent of streams in the Smokies sampled over an eight-year period were so acidic that they threatened the viability of brook trout populations. Furthermore, 90 percent of clouds sampled in the park have been found to be unnaturally acidic. Acidic clouds bathe the park's high elevation forests

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[14] National Park Service, "Great Smoky Mountains National Park: Nature & Science: Overview," available at: http://www.nps.gov/grsm/pphtml/nature.html (last visited July 16, 2006).

[15] National Park Service, "Air Quality in the National Parks, 2nd Edition," p. 37, available at: http://www2.nature.nps.gov/air/Pubs/aqnps.cfm.

[16] National Park Service, "Great Smoky Mountains National Park: Nature & Science: Overview," available at: http://www.nps.gov/grsm/pphtml/nature.html (last visited July 16, 2006).

during much of the growing season.[17] Acids in the soil poison microorganisms, as well as trees and other plants.[18] Research shows that some high elevations in Great Smoky Mountains National Park are receiving so much airborne nitrogen that the soil suffers from advanced nitrogen saturation.[19]

The Smokies also suffer from high levels of ozone pollution. Ozone exposures in the park are among the highest in the East. On average, ozone levels over the ridgetops of the park are up to two times higher than in nearby cities, including Knoxville and Atlanta.[20] The number of days with ozone levels above the national ambient air quality standard have risen sharply since 1989 posing threats to vegetation, as well as park visitors and employees. In 1999, the park recorded 52 "unhealthy" days that exceeded the standard.[21] Studies indicate that 30 species of plants experience leaf damage when exposed to controlled ozone levels similar to those that occur in the Smokies. Up to 90 percent of black cherry trees and tall milkweed plants in numerous park locations show symptoms of

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[17] National Park Service, "Air Quality in the National Parks, 2nd Edition," p. 37, available at: http://www2.nature.nps.gov/air/Pubs/aqnps.cfm.

[18] Great Smoky Mountains National Park Management Folio #2, Air Quality, available at http://www.nps.gov/grsm/gsmsite/airquality01.pdf (last visited July 16, 2006).

[19] National Park Service, "Great Smoky Mountains National Park: Nature & Science: Air Quality," available at: http://www.nps.gov/grsm/pphtml/subenvironmentalfactors23.html (last visited July 16, 2006).

[20] *Id.*

[21] National Park Service, "Air Quality in the National Parks, 2nd Edition," p. 41, available at: http://www2.nature.nps.gov/air/Pubs/aqnps.cfm.

ozone damage. In general, researchers have found that ozone exposure and damage are worse at higher elevations.[22]

Power plant emissions are not only major contributors to the pollution problems in the Smokies set out above, but they are also chiefly responsible for visibility degradation in the park.[23] Since 1948, based on regional airport records, average visibility in the southern Appalachians has decreased 40% in winter and 80% in summer. Annual average visibility at Great Smoky Mountains National Park is 25 miles, compared to natural conditions of 93 miles. During severe haze episodes, visibility has been reduced to under one mile. This degradation in visibility not only affects how far one can see from a scenic overlook, but also how well one can see. *Id.* Sulfate-caused haze causes colors to appear washed out and obscures landscape features. This pollution typically appears as a uniform whitish haze, different from the natural mist-like clouds for which the Smokies were named. *Id.* Increasingly, visitors no longer see distant mountain ridges because of this haze. This increased degradation has been traced directly to the presence of sulfates, the concentrations of which have increased in the region by 27% from 1984-1999. *Id.*

The Smokies are not the only national park suffering from visibility degradation. Shenandoah National Park is known internationally for spectacular mountain scenes. Skyline Drive was constructed in the 1930's as a scenic drive along the crest of the Blue Ridge mountains within Shenandoah National Park. The road was designed and constructed to provide scenic views

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[22] Great Smoky Mountains National Park Management Folio #2, Air Quality, available at http://www.nps.gov/grsm/gsmsite/airquality01.pdf (last visited July 16, 2006).

[23] National Park Service, "Great Smoky Mountains National Park: Nature & Science: Air Quality," available at: http://www.nps.gov/grsm/pphtml/subenvironmentalfactors23.html (last visited July 16, 2006).

within the park and into the Piedmont plateau to the east and the Shenandoah Valley to the west. 76 overlooks, or pullouts with parking, were constructed so motorists could stop at intervals along the Drive and enjoy the views.[24] According to the National Park Service. however, "air pollution, particularly during the summer season, has significantly degraded the distance, color, contrast and landscape details of park views from Skyline Drive, the Appalachian Trail, and high points in the park."[25] Like the Smokies, Shenandoah has also been adversely impacted by acid deposition. *Id.*

Other National Park units are suffering similar air pollution detriments caused in large part by power plant emissions. Researchers have found that mercury levels in the hair of endangered Indiana bats collected from the Mammoth Cave National Park are two to three times EPA's recommended limit for humans. They believe that the mercury contamination is likely the result of emissions from coal-fired power plants.[26]

In Rocky Mountain National Park, more than twenty years of study have linked changes in the chemistry of the park's water and soils, as well as damage to park species like the Engelmann spruce, to rising nitrogen levels in the park.[27] The

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[24] National Park Service, Shenandoah National Park, Nature and Science, Scenic Vistas, available at: http://www.nps.gov/shen/pphtml/subenvironmentalfactors25.html (last visited July 16, 2006).

[25] National Park Service, Shenandoah National Park, Nature and Science, Air Quality, available at: http://www.nps.gov/shen/pphtml/subenvironmentalfactors23.html(last visited July 16, 2006).

[26] Webb, et al. 2005. Occurrence and Distribution of Mercury in Mammoth Cave National Park, Paper No. 167-7, Geological Society of America.

[27] National Park Service, Rocky Mountain National Park, Nitrogen Deposition Correlated with Changes in Lake Organisms, available at: http://www.nps.gov/romo/downloads/CDRLC/summaries/diatoms.pdf (last

nitrogen pollution has been traced to pollution from from power plants, factories, oil and gas wells, fertilizer, and animal feedlots. *Id.* High-elevation ecosystems at Rocky Mountain National Park are particularly vulnerable to nitrogen deposition because the park's granite bedrock and shallow soils do not provide much chemical buffering, and the short growing seasons at high-elevation limit the amount of time plants have to absorb nitrogen during the year. These alpine plants evolved under very low nitrogen conditions, so they are less tolerant of excess nitrogen added to the environment by air pollution.[28]

These parks and others are suffering these injuries even though Congress sought to remedy the air pollution problem in parks almost 30 years ago with the Clean Air Act Amendments of 1977. Pub. L. 95-95, 91 Stat. 685 (1977). This Act granted special protections to National Parks. *See* 42 U.S.C. § 7472 (designating National Parks over 6000 acres in size as Class I areas) and 42 U.S.C. § 7475(d) (requiring additional measures to insure that new and modified sources seeking permits under the PSD program do not adversely impact Class I areas). Indeed, the Act contains an entire program dedicated to improving and protecting visibility in Class I areas. 42 U.S.C. §§ 7491-92.

Although EPA has recently developed two rulemakings to curb park-harming emissions from power plants, the Regional Haze Rule, 64 Fed. Reg. 35714, (July 1, 1999) and 70 Fed. Reg. 39104 (Regional Haze Regulations and Guidelines for Best Available Retrofit Technology (BART) Determinations), and the Clean Air Interstate Rule ("CAIR"), 70 Fed. Reg. 25162

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visited July 16, 2006).

[28] Rocky Mountain National Park Initiative, "Nitrogen Deposition: Issues and Effects in Rocky Mountain National Park (Technical Background Document)," March 2004, available at: http://www.cdphe.state.co.us /ap/rmnp/noxtech.pdf (last visited July 16, 2006).

(May 12, 2005), those rules do not supersede the New Source Review rules, and they do not take effect until 2015. *See* 70 Fed. Reg. 39145 (2005).

As Congress debated the 1977 Amendments to the Clean Air Act, it believed that old, uncontrolled plants were being phased out:

> There are in the United States approximately 200 old coal-fired power plants over 20 years of age. These plants are moving into the second half of their useful service life. They are operating at reduced capacity factors--some are used on cyclical or peaking loads only and most operate at less than 50 percent of their stated capacity. They are typically among the most expensive units to operate on a system. Most will be totally phased out of operation in the next 5 to 20 years.

S. Rep. No. 127, 95th Cong. (1977), at 128 (Statement of Senator Baker). Thus, as the D.C. Circuit noted in 1980:

> Implementation of the statute's definition of "modification" will undoubtedly prove inconvenient and costly to affected industries; but the clear language of the statute unavoidably imposes these costs except for *de minimis* increases. The statutory scheme intends to "grandfather" existing industries; but the provisions concerning modifications indicate that this is not to constitute a perpetual immunity from all standards under the PSD program. If these plants increase pollution, they will generally need a permit. Exceptions to this rule will occur when the increases are de minimis, and when the increases are offset by contemporaneous decreases of pollutants. . . ."

Alabama Power Co. v. Costle, 636 F.2d 323, 400 (D.C. Cir. 1980); *see also Ohio Edison*, 276 F. Supp. 2d at 850 ("Congress chose to 'grandfather' existing pollution sources from the NSPS and NSR provisions at the time the statute was enacted. . . . Congress did not, however, intend that such

existing sources be forever spared the burden and expense of installing pollution control devices.").

This case and others filed by the Department of Justice and citizens seek to bring into compliance sources that have attempted to evade New Source Review requirements on a massive scale. When EPA and the Department of Justice filed this case in 1999, it also proceeded against six other utility companies covering 17 power plants and estimated that the failure of the identified utilities to comply with the New Source Review regulations had "resulted in tens of millions of tons of sulfur dioxide, nitrogen oxides, and particulate matter illegally emitted into the air." [29] Amici believe that bringing Duke and other violators of New Source Review requirements into compliance will be a significant step forward in solving the air quality problems faced by the nation's National Parks.

CONCLUSION

For the foregoing reasons, the judgment of the Fourth Circuit Court of Appeals should be reversed.

Respectfully submitted this 21st of July, 2006.

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[29] U.S. Department of Justice, U.S. EPA, "U.S. Sues Electric Utilities in Unprecedented Action to Enforce the Clean Air Act," press release, November 3, 1999. Available at: http://www.usdoj.gov/opa/pr/1999/November/524enr.htm (last visited July 15, 2006).

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